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Installation and Operation Manual

319 Power Examination Table

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General Operation and Care of Equipment Introduction

This manual covers complete instructions for the installation, operation, and normal care of the 319 Medical Examination Table.

For the purpose of this manual, the word TABLE is synonymous with the word CHAIR.

This table has been designed to help reduce effort and work fatigue involved in the examination and treatment of an ever-increasing number of patients during the doctor's normal working day.

The height of the table, the angle of the table top, and the upper section of the table top are easily adjusted by the use of an electric-hydraulic power unit. Height of the table can be adjusted from 26" to 42". The angle of the table top may be varied from horizontal to 45° and the upper portion of the table top can be adjusted from horizontal to a full chair position. The foot/leg support may be adjusted from horizontal or vertical positions. The combination of these four motions provides a table which can not only be tailored to meet the individual doctor's requirements, but will meet the requirements of most examinations and treatments being performed in the doctor's office today.

The 319 table has a Pendant hand control as well as a footswitch (optional) to control table adjustments. There is also an "Auto Return" feature which lowers the base function to its minimum height with a momentary touch of a button.

LIMITED WARRANTY

Midmark Corporation warrants to the purchaser all new products, sold by it directly or through an authorized representative, to be free from defects in material or workmanship, under normal use and service, for a period of one (1) year on parts and one (1) year on labor from date of in-service (excluding bulbs, optical systems, bulb holders, and sterilizable handles, as well as any reusable parts.)
Midmark's responsibility and liability shall be limited to the repair or replacement of any part which we, Midmark, determine to be defective within the applicable warranty period.
Midmark shall not be liable for any commercial loss or damage, direct or consequential, arising out of the use of or the inability to use the product. THE WARRANTY EXPRESSED HEREIN SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE.
The foregoing may not be changed except by an agreement signed by an authorized representative of Midmark Corporation.

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Important Instructions

Safety First: The primary concern of Midmark Corporation is that this equipment be operated and maintained with the safety of the patient and doctor in mind. To assure safer and more reliable operation:

1. Read this manual before installing or operating your equipment.
2. It is the responsibility of the purchaser to assure that appropriate personnel are informed of the contents of this manual.
3. Be sure that you understand the instructions contained in this manual before attempting to install or operate this equipment.
4. This manual should remain permanently affixed to this equipment.

Warnings

Throughout this manual are Notes, Caution, and Danger warnings that call attention to particular procedures. The items are used as follows:

Note
A note is used to amplify an operating procedure, practice, or condition.

CAUTION
A CAUTION is used for an operating procedure, practice, or condition which, if not correctly followed, could result in equipment damage.

DANGER
A DANGER is used for an operating procedure, practice, or condition which, if not correctly followed, could result in personal injury.

DANGER warnings are repeated here. Become thoroughly familiar with them and observe them at all times.

1. Do not lift at points B, Figure 1. These points are not supported areas. Lifting at these areas could cause personal injury or equipment damage.
2. Do not use stirrups to lift or move table. Using the stirrups for this purpose could result in personal injury or equipment damage.
3. Use 115 volt, 60 hertz alternating current only. Failure to do so could result in personal injury or equipment damage.
4. Do not use this table in an explosive or oxygen-enriched atmosphere. Using the table in these situations could cause personal injury or equipment damage.
5. All exposed metal parts of the table are electrically grounded. When performing a cauterization or similar treatment, patient must be insulated from the metal portions of the table by non-conductive material. Failure to do this could result in electrical shock or burns to the patient.
6. If the table malfunctions, immediately remove your hand or foot from the control switch, unplug the power cord from the wall receptacle, and assist the patient from the chair.
7. Keep all foreign objects away from the footswitch so that the pedals are not accidentally activated. Failure to do so could result in personal injury or equipment damage.
8. Keep your arms and legs and your patient's arms and legs clear of all moving parts when changing table positions. Failure to do so could result in personal injury.
9. Be sure all persons and equipment are clear of the table before activating auto return. Failure to do so could result in personal injury or equipment damage.
10. Failure to lock the knee rest support into position could result in personal injury or equipment damage.
11. Failure to engage lateral locking mechanism could result in personal injury.
12. Failure to perform a periodic inspection could result in personal injury or equipment damage.

Unpacking and Installation

Unpacking: To avoid damaging the table's upholstered top or side panels, do not use a knife or other sharp object to open the packaging when unpacking. Unbolt the table from the wooden shipping skid by removing four (4) bolts on the underside of the base, one at each corner. After unbolting, remove the chair from the skid, lifting only at Points A, Fig. 1.

FIGURE 1

Leveling: A leveling screw is located under each corner of the table base. By adjusting these in or out, a level, solid installation can be achieved on uneven floors.

DANGER
Do not lift at Points B, Figure 1. These points are not supported areas. Lifting at these points could cause personal injury.

DANGER
Do not use stirrups to lift of move table. Using the stirrups for this purpose could cause personal injury or equipment damage.

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DANGER
All exposed parts of the table are electronically grounded. When performing a cauterization or similar treatment, patient must be insulated from the metal portions of the table by non-conductive material. Failure to do this could result in electrical shock or burns to the patient.

Electrical: The electrical rating for the 319 table is 115 VAC, 60 Hertz, 12 Ampere. The three-pronged grounding plug on the table power cord must be inserted into a matched three-pronged, GROUNDED, NON-ISOLATED, CORRECTLY POLARIZED, 115 volt receptacle.

Note
Grounding reliability can only be achieved if this equipment is connected to an equivalent receptacle marked Hospital Grade. Reference label on power cord (D, Fig. 1).

Operation of table power features

For optimal performance, allow the table to reach room temperature before operating.

Note
This equipment is not designed for continuous operation. **The maximum runtime is one (1) minute ON - ten (10) minutes OFF.** If the unit is operated continually, a thermal overload switch will shut off the table motor. If normal operation ceases, immediately remove your hand or foot from the control switch. The overload switch will automatically reset after the motor cools (minimum ten (10) minutes).

Should the unit fail to start after a cool down period, contact an authorized service center to investigate the cause of the failure. Reference label located on motor cover (C, Fig 1).

DANGER
If the table malfunctions, immediately remove your hand or foot from the control switch, unplug the power cord from the wall receptacle, and assist the patient from the chair.

Note
The Motor Cover is not to be removed by non-qualified service personnel. Reference label located on motor cover (C, Fig 1).

CAUTION
Caution - electrical shock hazard. Do not remove this cover. Refer servicing to qualified service personnel.

Pendant Hand Control: A cord connected hand control which will operate all table functions is supplied as standard. This unit places all controls at your fingertips, (Fig. 2).

The hand control can be connected to receptacles mounted on the table which are located at three locations. There is a receptacle located on both the right hand and left hand side panels and the third is located at the foot end of the tables base, although this location should be reserved for the optional Footswitch when applicable, (Fig. 3).

To connect the cable of the hand control or optional footswitch to a receptacle: Align plug tab with notch on receptacle (A, Fig. 3). Press plug into position.

To remove plug: Depress tab (A, Fig. 3). Pull pug from receptacle.

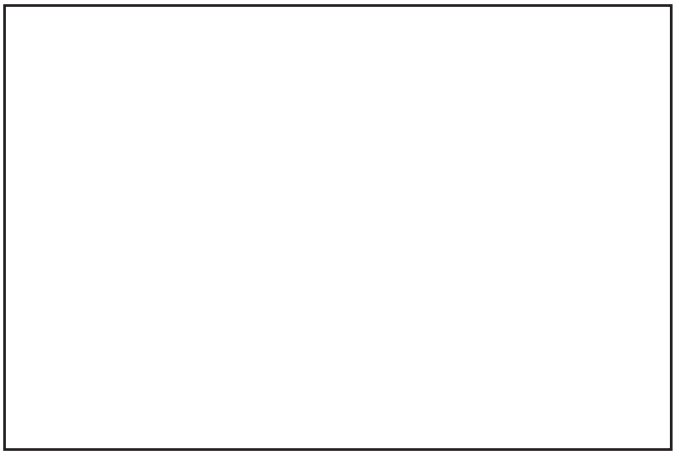


FIGURE 2

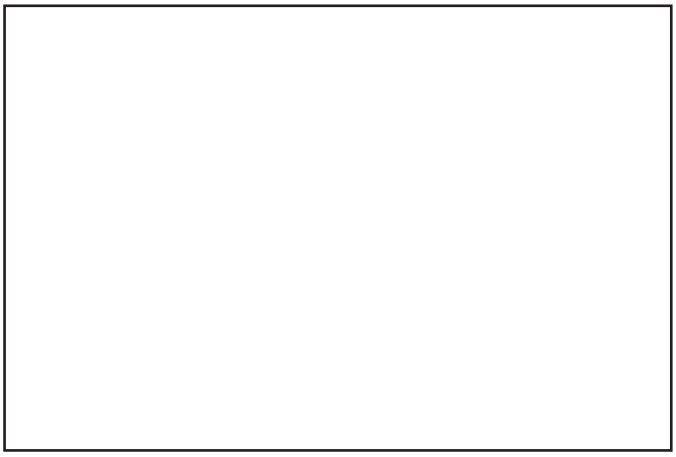


FIGURE 3

DANGER
Keep all foreign objects away from the footswitch so that the pedals are not accidentally activated. Failure to do so could result in personal injury or equipment damage.

DANGER
Keep your arms and legs and your patient's arms and legs clear of all moving parts when changing table positions. Failure to do so could result in personal injury.

Footswitch Controls Optional): A cord-connected foot control may be purchased as an option. (Fig. 4). The foot control will operate all table functions and is designed for operator comfort. A firm stance may be maintained by placing your foot onto one of the four footswitch sections. By rocking your foot side to side, you will activate movement of the table. Each footswitch section is labeled accordingly for each table function. The table functions are:

1. Table up/down
2. Back up/down
3. Tilt up/down
4. Foot section up/down
5. Auto Return/Auto Return stop

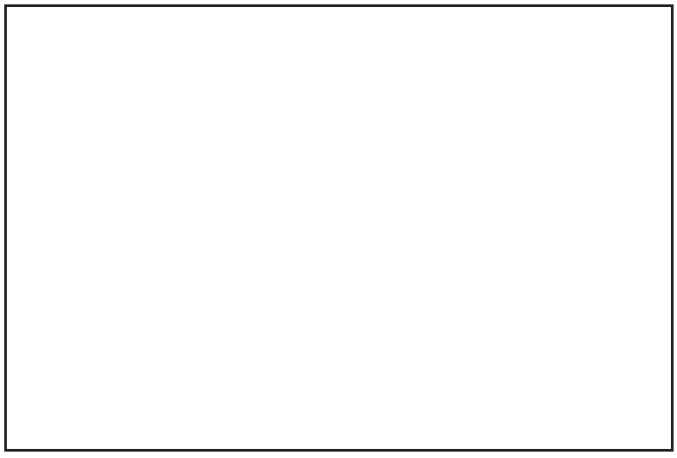


FIGURE 4

Patient Positioning - Manual Control

Adjustment of Table Height: To raise table, depress button labeled “Table Up” on hand control, (Fig. 2). On optional footswitch, depress left side of footswitch pedal marked “Table Up,” (Fig. 4). Hold button or pedal down until table reaches desired height or maximum height is achieved.

To lower the table, depress button marked “Table Down” on hand control. On optional footswitch depress right side of pedal marked “Table Down.” Hold control down until table reaches desired height or minimum height is achieved.

DO NOT hold control switch down after the table has reached the extreme low or extreme high position. Operation of the table for an extended period of time at either of these positions will overheat the motor.

Adjustment of the Back Section: To raise the upper portion of the table backrest from the horizontal to chair position, depress the button or left side of the footswitch pedal marked “Back Up” and hold control down until the desired position is obtained or the chair position is achieved.

To lower the table backrest, depress the button or right side of the footswitch pedal marked “Back Down” and hold pedal down until the desired position is obtained or the minimum position is achieved.

DO NOT hold control switch down after either of the extreme positions has been reached. Extended operation of the motor at either of these positions will overheat the motor.

Adjustment of the Table Top Angle: To tilt the table top section, depress the button or left side of footswitch pedal marked “Tilt Up” and hold control down until the desired degree of tilt is obtained or the maximum tilt is reached.

To bring the seat section back into the horizontal position, depress the button or right side of the footswitch pedal marked “Tilt Down” and hold pedal down until the desired position is obtained or the horizontal position is achieved.

DO NOT hold control switch down after either of the extreme positions has been reached. Extended operation of the motor at either of these positions will overheat the motor.

Adjustment of the Foot/Leg Rest Support: To raise the foot/leg rest support from vertical to horizontal position, depress the button or left side of footswitch pedal marked “Foot Up” and hold control down until the desired position is obtained or the horizontal position is achieved.

To lower foot/leg rest support from horizontal to vertical position, depress the button or right side of footswitch pedal marked “Foot Down” and hold control down until the desired position is obtained or the vertical position is achieved.

DO NOT hold control switch down after either of the extreme positions has been reached. Extended operation of the motor at either of these positions will overheat the motor.

Note
A safety switch prevents operation of the foot/leg rest when the optional irrigation pan is extended. If the foot up or down button is pressed with the pan extended, an LED will light on the hand control indicating “Pan Out”. If this situation occurs, simply return the pan to its fully stored position. If normal operation of the foot/leg rest is not restored, call your service representative.

Automatic Return: The "Auto Return” will lower the table base to its lowest position with a momentary touch of a button. To activate the "Auto Return" feature with the base in any raised position press the green button located on the hand control (A, Fig. 2) or the button labeled “Auto Return” on the optional footswitch (A, Fig. 4).

DANGER
Be sure all persons and equipment are clear of table before activating auto return. Failure to do so could result in personal injury or equipment damage.

If for any reason "Auto Return" must be stopped, press the red button marked "Stop" located on the hand control (Fig. 2) or the optional footswitch (Fig. 4).

Table Features

Procto Knee Rest: The stored position of the procto knee rest is illustrated in Figure 5. To remove the knee rest, lift levers (A, Fig. 5) on each side of knee rest. This releases the locking mechanism allowing for removal of knee rest.

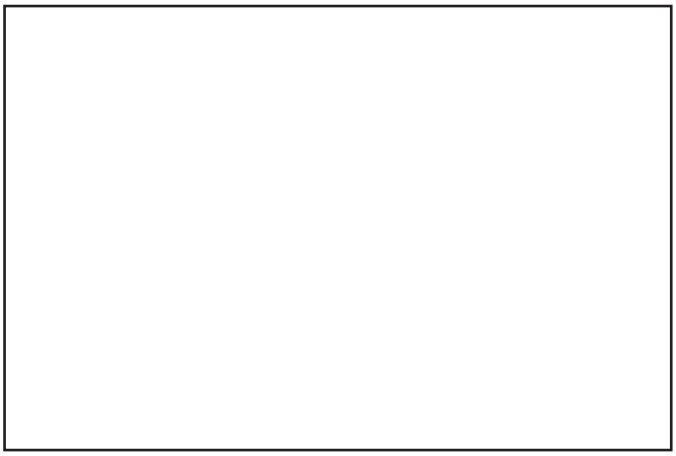


FIGURE 5

The foot/leg section provides four (4) procto knee rest positions (A, Fig. 6). To install the knee rest into either of these positions, align the metal guides (A, Fig. 7) with slots (A, Fig. 6) and insert until you hear the mechanical locking device engage.

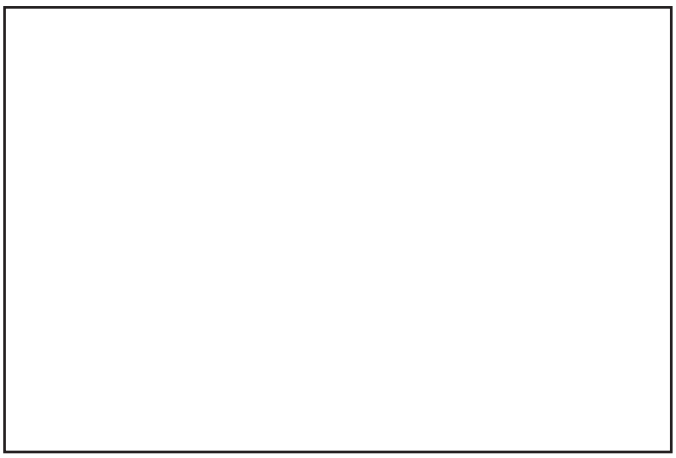


FIGURE 6

DANGER
Failure to lock knee rest support into position could result in personal injury or equipment damage.

Removal of the knee rest from a procto position is the same as removal from the stored position. Lift levers (A, Fig. 5) on each side of knee rest. To return the knee support to its stored position, align metal guides (A, Fig. 7) with slots (B, Fig. 6) and insert until you hear the mechanical locking device engage.

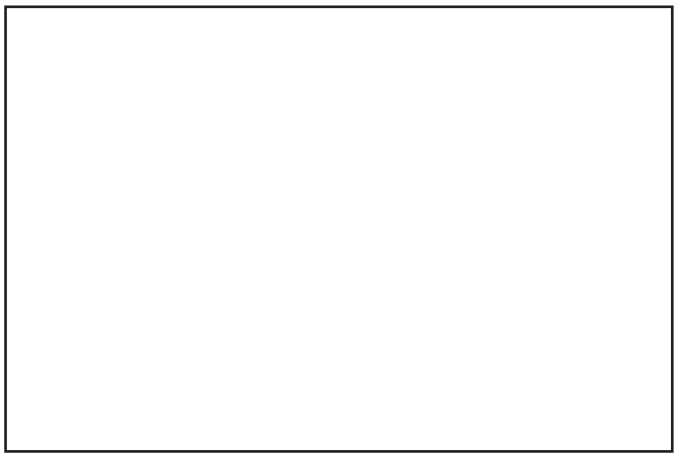


FIGURE 7

DANGER
Failure to engage laterall locking mechanism could result in personal injury.

Stirrup Adjustment: Grasp end of stirrup assembly (A, Fig. 8). Pull stirrups straight out of the table to full extension. Unfold stirrup to an erect position as shown (Fig. 8).

Lateral (Width) Adjustment: The 319 table has three (3) lateral positions for both R.H. and L.H. stirrups.

To adjust lateral positioning, lift stirrup assembly at the proper point (A, Fig. 8) and then rotate assembly to right or left. The stirrup mechanism will “click” into position as it is rotated.

When the desired position is attained, lower stirrup (A, Fig. 8) to engage width locking mechanism. Check that lateral (width) locking mechanism is engaged by attempting to rotate stirrup assembly without lifting at point A (Fig. 8).

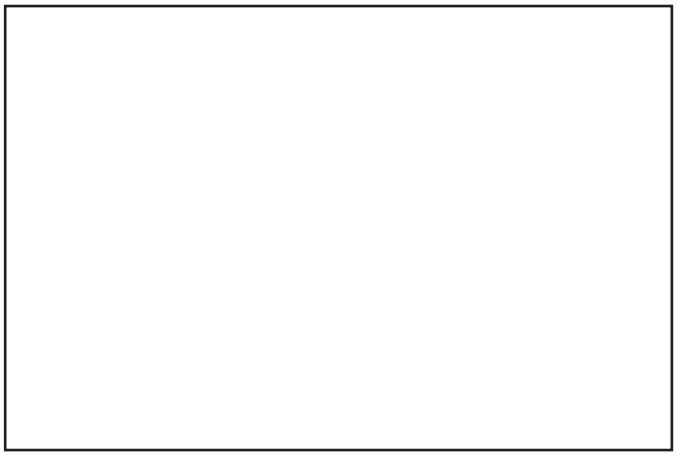


FIGURE 8

Extension Adjustment: Stirrup extension length is adjusted by holding stirrup at point A (Fig. 8), and sliding stirrup assembly in and out of table. Check that lateral (width) locking mechanism is engaged by attempting to rotate stirrup assembly without lifting at point A (Fig. 8).

DANGER
Failure to engage laterall locking mechanism could result in personal injury.

Storing Stirrups After Use: Extend stirrup assemblies to full extension, fold stirrups down against bar, rotate stirrups to Position #1 (Fig. 8), and slide complete assembly into table.

Optional Irrigation Pan: A stainless steel irrigation pan is located between the stirrups as shown (A, Fig. 9). The pan slide assembly extends easily from the table by grasping and pulling handle (B, Fig. 9), and will automatically stop when extended to its full out position.

The irrigation pan may be removed from the slide assembly by lifting evenly at Points C (Fig. 9). To replace the pan, align and press firmly into slide assembly.

Note
A safety switch prevents operation of the foot/leg rest when the optional irrigation pan is extended, an LED will light on the hand control indicating “Pan Out”. If this situation occurs, simply return the pan to its fully stored position. If normal operation of the foot/leg rest is not restored, call your service representative.

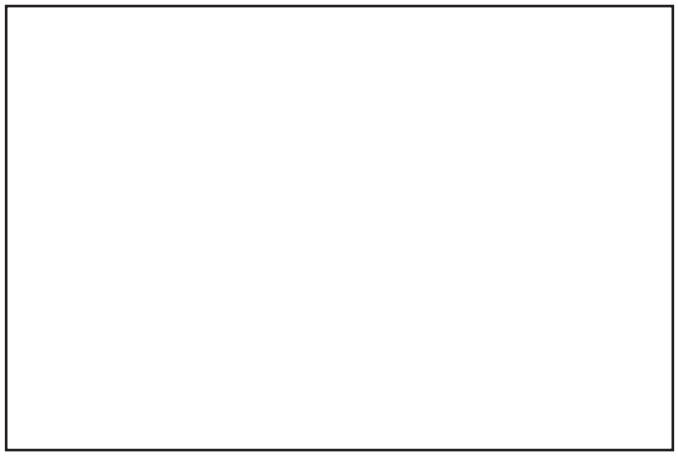


FIGURE 9

Paper Roll: Storage for a standard 21" wide x 3" diameter paper roll is conveniently provided under the upper portion of the back section (Fig. 10).

Access to the paper roll storage area is accomplished by rotating the holder access cover (A, Fig. 10) toward the headrest. It is best to do this with the back section in a horizontal position.

Insert paper roll, return access cover to closed position allowing paper to drape out of holder. Paper can now be dispensed and positioned over upholstered area of table.

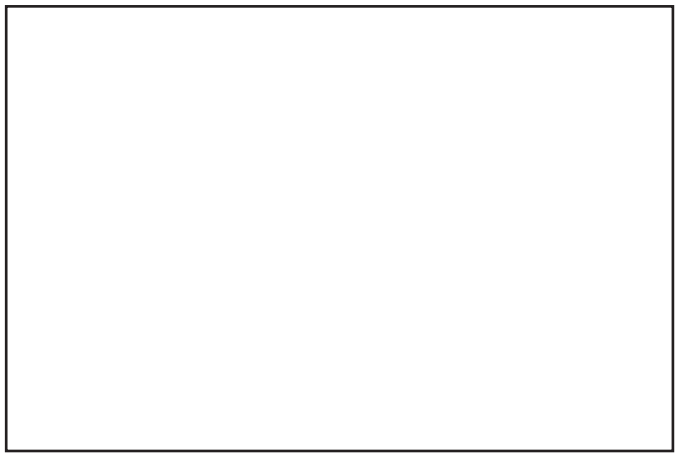


FIGURE 10

Headlock Adjustment: To adjust the holding action of the headlock, release the lock handle and loosen the lock screw using a $^{3}/_{32}$" allen wrench (A, Fig. 11). Tighten the adjusting screw (B, Fig. 11) with a $^{3}/_{16}$" allen wrench or a $^{1}/_{2}$" wrench to obtain the greatest possible holding power without making the handle operation too difficult. Then with the handle in locked position, tighten the lock screw (A, Fig. 11).

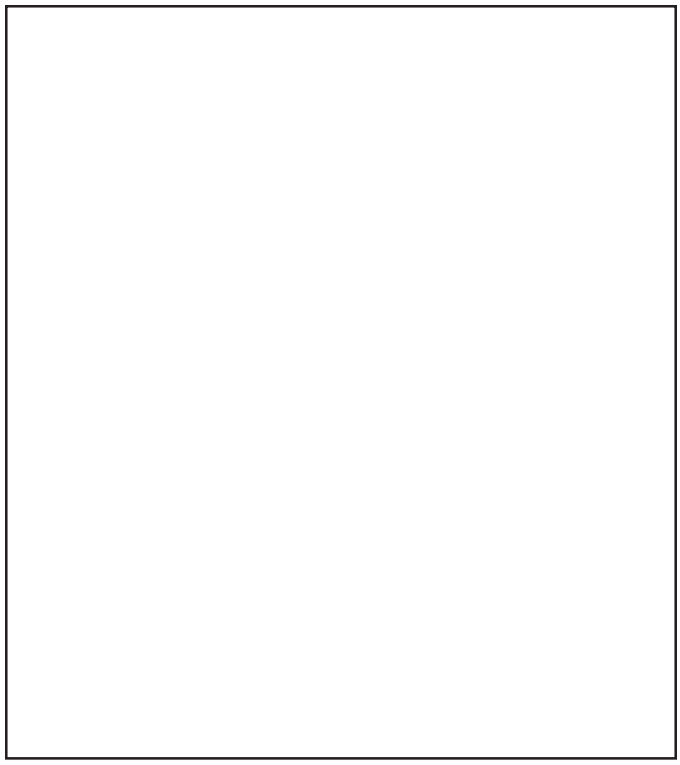


FIGURE 11

Note

Light oil on the pivot points of the handle will help to a great degree the ease of operation of the handle.

In some rare cases, it may be necessary to adjust the handle stop to insure good holding power with ease of handle ioeration or to prevent the handle from springing loose under shock loads.

For proper action the handle stop m,ust be adjusted spo thjat when the handle is pushed down for locking action, the handle reaches a point where it want to lock itself by suddenly going over the center. The proper position of the stop is just a fraction over center. The stop is adjusted by loosening the lock nut (C, Fig. 11) and turning the set screw stop (D, Fig. 11) with a $^{1}/_{8}$" allen wrench. After adjustment, lock the stop screw with the locking nut (C & D, Fig. 11).

Upholstery Installation and Removal

INSTALLATION

I. HEADREST PILLOW (A, FIG. 12)
Orient table into chair position. Align pillow mount on headrest cushion with pivot mount of table, press parts fully together and secure by latching three (3) retaining latches.

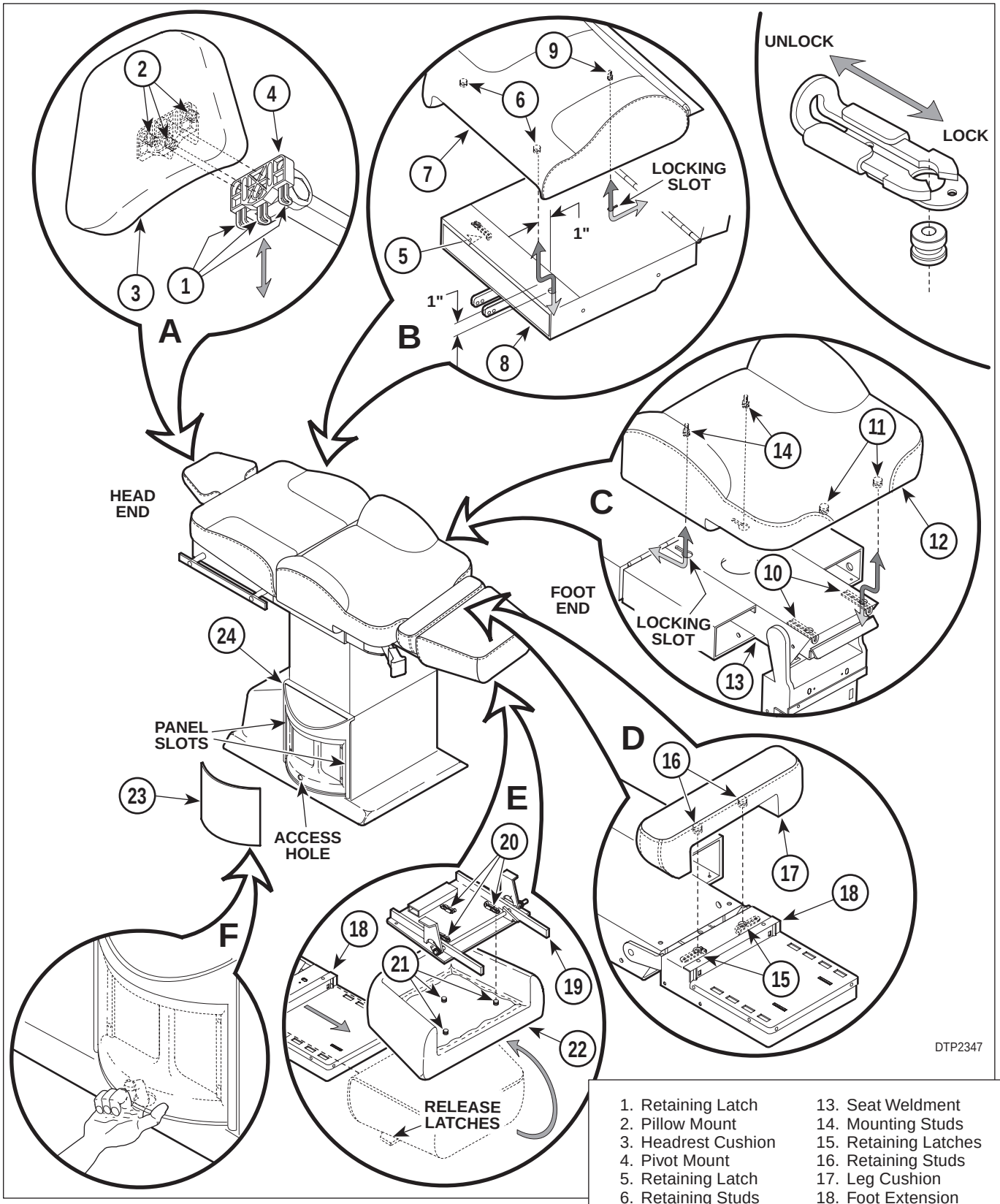
II. UPHOLSTERED BACK CUSHION (B, FIG. 12)
Orient table with back in horizontal, flat table position. Place back cushion onto table's back weldment with hinge cover toward foot of table. Align one (1) mounting stud, on underside of cushion, to locking slot in back weldment and allow stud to drop into slot. Next, slide cushion toward foot of table until retaining studs drop into holes, make sure that hinge cover lays over hinge. Secure back cushion by latching two (2) retaining latches located in paper roll holder.

III. UPHOLSTERED SEAT CUSHION (C, FIG. 12)
Place seat cushion on table's seat weldment, noting orientation of seat cushion, (C, Fig. 12). Align two (2) mounting studs, on underside of cushion, to locking slots in seat weldment and allow studs to drop into slots. Next, slide cushion toward head of table until retaining studs drop into holes. Secure seat cushion by latching two (2) retaining latches under seat near foot end of table.

IV. UPHOLSTERED LEG CUSHION (D, FIG. 12)
Orient table with foot extension in full up, horizontal position. Align two (2) retaining studs, on underside of leg cushion with holes in foot extension, noting orientation of leg cushion, (D, Fig. 12). Secure leg cushion by latching two (2) retaining latches under foot extension.

V. UPHOLSTERED FOOTREST CUSHION (E, FIG. 12)
Place footrest cushion upside-down on smooth clean work surface. Remove footboard assembly from table by actuating release levers and sliding horizontally away from table. Install footboard weldment onto footrest cushion as shown, (E, Fig. 12). Secure weldment to cushion by latching three (3) retaining latches. Install footrest cushion assembly on table by placing assembly on foot extension, align metal guides with slots and insert until you hear the mechanical locking device engage.

VI. COLOR SIDE PANEL INSERTS (F, FIG. 12)
Orient color panel insert with longest length side to side. Align and insert left end of color insert (approx. $^{3}/_{16}$") into left side of plastic side panel on table. Hold panel firmly and bow panel outward at it's middle, align right end of panel to right side of plastic side panel and insert. Once the ends of the color panel are installed, slide panel side to side to achieve proper fit.



1. Retaining Latch
2. Pillow Mount
3. Headrest Cushion
4. Pivot Mount
5. Retaining Latch
6. Retaining Studs
7. Back Cushion
8. Back Weldment
9. Mounting Stud
10. Retaining Latch
11. Retaining Stud
12. Seat Cushion
13. Seat Weldment
14. Mounting Studs
15. Retaining Latches
16. Retaining Studs
17. Leg Cushion
18. Foot Extension
19. Foot Board Weldment
20. Retaining Latch
21. Retaining Studs
22. Footrest Cushion
23. Side Panel
24. Color Panel Insert

FIGURE 12

REMOVAL

I. UPHOLSTERED TOP (HEADREST BACK, SEAT, LEG, & FOOT CUSHIONS)
Locate installation instruction listed above for corresponding cushion and reverse instructions to remove upholstered cushion.

II. COLOR SIDE PANEL INSERTS (F, FIG. 12)
Locate panel access hole in bottom of plastic side panel. Push outward on color insert, using your index finger as illustrated, (F, Fig. 12), until bottom edge of panel can be grasped by your other hand. Then pull panel outward, while holding bottom edge, until panel "POPS" from table.

Care of Tables

Care of Upholstery and plastic covers: The upholstery material used to cover the top of the table is resistant to most medicinal-type stains but may be damaged by solvents and dyes. Regular care should be maintained by daily wiping with a damp cloth or sponge and periodic cleaning with a mild soap and water solution.

Any fluid spilled on the upholstery or plastic cover should be removed as quickly as possible.

In the case of stain, attempt to remove it with soap and water.

Care of Painted Metal Surfaces: All painted metal surfaces should be wiped clean with a clean, soft cloth weekly and periodic applications of paste wax made to all smooth painted surfaces to preserve the finished luster.

Care of Moving Parts: Moving parts such as the tilt pivot and foot extension pivot pins, back hinge, and stirrup indexing button (D, Fig. 8) should be oiled occasionally with a light machine oil to help insure quiet, smooth, dependable operation. Stirrup bars can be lubricated using a standard household furniture wax. Lubricant will allow free movement of sliding parts and reduce possibility of noise.

Maintenance

Little routine maintenance is required other than a periodic inspection of hydraulic hose lines and electrical cords to make sure they are free of cuts or damage and clear of moving parts. Due to the mechanical, electrical nature of this equipment periodic inspections at six (6) month intervals by your dealer are recommended.

DANGER
Failure to perform a periodic inspection could result in personal injury or equipment damage.

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